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REMARKS

Claims 1, 6-11, 13, 14 and 15 are pending in the application. Claim 2-5 have been canceled. Applicants acknowledge the Examiner's finding of allowable subject matter in Claim 12. Claims 1 and 8 have also been amended. Claim 15 has been added. Support for the amendments and added Claim can be found in the specification as originally filed.

Rejections Under 35 USC 112, second paragraph

Claims 1, 8 and 11 stand rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Accordingly, Claims 1, 8 and 11 have been amended for further clarification to include that the no connective engagement "between the piston and the plunger." Reconsideration of the Examiner's rejection is respectfully requested.

The Office Action indicates that the Examiner believes the claim 1, 18 and 11 using the term "Connective Engagement " to be self contradictory. However, Applicants' invention includes connectively engagement between the plunger and piston. One non-limiting example of connective engagement is that:

The operation of the second releasable mechanism 40 illustrated in Figure 35 will now be described. Because the diameter of hole 1214 in plunger 1238 is larger than the diameter of elastomeric member 1202 and of actuator 1210, when piston 1242 is pushed forward, elastomeric member 1202 and actuator 1210 easily fit into hole 1214. Plunger 1238 can then be advanced by piston 1242 without a connective engagement existing therebetween. However, once positioned in this manner, to connectively engage the plunger 1238 (e.g., to retract plunger) actuator 1210 is pulled toward elastomeric member 1202 by rod 1208, as shown by arrow 1216 in Figure 35. The pressure from actuator 1210 compresses elastomeric member 1202 so that external sides 1204 swell or expand from their unstressed condition. The approximate shape of the swelled walls 1218 of elastomeric member 1202 is shown in dotted line format in Figure 35. Swelled walls 1218 engage walls 1220 of hole 1214 so that piston 1242 releasably engages plunger 1238. Plunger 1238 can now be retracted to, for

example, aspirate fluid into the syringe. (Page 29, para 4)
Thus, Applicant's invention is connectively engaged in one direction and not the other.

REJECTIONS UNDER 35 USC 102(b)

Claims 8-10 stand rejected under 35 USC 102(b) as being anticipated by Barresi et al. (hereinafter "Barresi").

It is well settled that in order for a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in prior art. The disclosure requirement under 35 USC 102 presupposes knowledge of one skilled in art of claimed invention, but such presumed knowledge does not grant license to read into prior art reference teachings that are not there. *See Motorola Inc. v. Interdigital Technology Corp.* 43 USPQ2d 1481 (1997 CAFC). It is also well-settled that a 35 USC 102 rejection must rest upon the literal teachings of the reference and that the teachings must disclose every element of the claimed invention in as complete detail as is contained in the claim (See. *Jamesbury Corp v. Litton Industrial Products, Inc.* 225 USPQ, 253, 256 (CAFC 1985); *Kalman v. Kimberly-Clark Corp* 218 USPQ 781, 789 (Fed. Cir. 1983)).

Independent Claim 8 has been amended and is directed to an injector system including a piston movably disposed at least partially within the housing and operable to drive the plunger of the syringe in a forward direction without a connective engagement between the piston and the plunger to dispense fluid from the forward end of the body during an injection procedure, wherein the piston is adapted to connectively engage the plunger to retract the plunger within the syringe, wherein the piston comprises a collet member comprising one or more segment members adapted to deflect inside the plunger in a radial direction to engage the plunger when the piston is retracted." Thus, in a forward direction the piston drives the plunger without connective engagement and in a retracting direction the collet member deflects and engages inside the plunger.

Barresi discloses a collet 110 driven by a clamp screw 112 that captures the

plunger button 36 therein. The turning of the clamp screw 112 retains the plunger button 36 against the interior of a recess 53.(col. 4, line 66 to col. 5, line 2). Therefore, in either a forward direction or a retracting direction, the plunger button 36 is connected to the collet 110. Further, the collect is sized and shaped such to extend around the outer perimeter of the plunger button 36. Thus, Barresi does not disclose all elements of Applicants' invention including "a piston movably disposed at least partially within the housing and operable to drive the plunger of the syringe in a forward direction without a connective engagement between the piston and the plunger" and "wherein the piston comprises a collet member comprising one or more segment members adapted to deflect inside the plunger in a radial direction to engage the plunger when the piston is retracted."

Claims 9 and 10 depend from Claim 8, which as discussed herein is believed to be allowable. Thus, Claims 9 and 10 are also believed to be allowable. Accordingly, reconsideration of Claims 8-10 is respectfully requested.

REJECTIONS UNDER 35 USC 102(e)

Claims 1, 6, 7, 8-11, 13 and 14 stand rejected under 35 USC 102(e) as being anticipated by Trull et al. (hereinafter "Trull").

It is well established that for a reference to be relevant under 35 USC 102(e) the invention must be described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language. See MPEP 2100 and 706.02(f)(1).

Applicants' inventions include in Claim 1 a piston that "comprises an elastomeric member adapted to expand in a radial direction to connectively engage the plunger to retract the plunger within the syringe;" Claim 8 is directed to a piston that "comprises a collet member comprising one or more segment members adapted to deflect inside the plunger in a radial direction to engage the plunger when the piston is retracted." Claim 11 includes "one or more plunger gripper members associated with the piston and adapted to be biased by the sleeve member into engagement with the plunger upon retraction of the piston."

However, Trull discloses resilient members that are configured to operate in a different direction. In particular, Trull discloses that:

The driving head 240 is drivable in either of the forward or rearward directions, as indicated by bidirectional arrow A. The translation of the driving head by the reciprocateable drive shaft 254 causes the engagement elements 232 and 234 to be deflected in the directions of movement indicated by bidirectional arrows B and C, with the resilient elements being translated radially outwardly by forward movement of the driving head, and radially inwardly by retracting movement of the driving head, as a result of the tapered configuration of the wall surface 244 and the driving head 242 surface.

In operation, the angiographic syringe is positioned as shown, and forward movement of the drive shaft 254 and corresponding advancement of the driving head 240 causes the resilient elements 233 and 234 to move radially outwardly to engage with the matable surfaces 228 and 230, so that the driving head projections bear compressively outwardly against the projection elements of the plunger, to engage the driving head and plunger.

Conversely, when the plunger is retracted by the driving head, and the driving head enters the cavity bounded by conical wall surface 244, the retraction will cause the retention elements 232 and 234 to radially inwardly translate and to disengage from the engagement surfaces of the projections on the plunger. (Col. 10, lines 40-65).

Thus, Trull discloses a driving head that is designed completely differently than Applicants' invention. In fact, Trull is completely opposite of Applicants' invention wherein retraction of the driving head causes retention elements to radially inwardly translate and to disengage from the engagement surfaces of the plunger, but during the

forward movement of the driving head causes retention elements to outwardly translate and to engage. Accordingly, Trull does not disclose Applicant's invention.

Further, regarding Claim 1, Claim 1 is directed to an injection system including a piston that "comprises an elastomeric member adapted to expand in a radial direction to connectively engage the plunger to retract the plunger within the syringe." The elastomeric member is a cylindrical element with external walls and internal walls. In one non-limiting example of Applicants' invention:

[t]he diameter of elastomeric member 1202 is slightly smaller than the diameter of the hole 1214 in plunger 1238. Also, the diameter of actuator 1210 is smaller than the diameter of hole 1214.

The operation of the second releasable mechanism 40 illustrated in Figure 35 will now be described. Because the diameter of hole 1214 in plunger 1238 is larger than the diameter of elastomeric member 1202 and of actuator 1210, when piston 1242 is pushed forward, elastomeric member 1202 and actuator 1210 easily fit into hole 1214. Plunger 1238 can then be advanced by piston 1242 without a connective engagement existing therebetween. However, once positioned in this manner, to connectively engage the plunger 1238 (e.g., to retract plunger) actuator 1210 is pulled toward elastomeric member 1202 by rod 1208, as shown by arrow 1216 in Figure 35. The pressure from actuator 1210 compresses elastomeric member 1202 so that external sides 1204 swell or expand from their unstressed condition. The approximate shape of the swelled walls 1218 of elastomeric member 1202 is shown in dotted line format in Figure 35. Swelled walls 1218 engage walls 1220 of hole 1214 so that piston 1242 releasably engages plunger 1238. Plunger 1238 can now be retracted to, for example, aspirate fluid into the syringe. (Specification, page 29, para 4)

Trull discloses a driving head 240 that has an outer surface of frustoconical shape as shown, presenting an outer surface 242 which is slideably engagable against the interior wall surface 244 of the receptacle 246 of the face plate adapter assembly 250 (Col. 10, lines 29-32). Therefore, Trull does not disclose a piston with an elastomeric member of Applicants' invention.

Claims 6-7, 9-10 and 12-14 depend from Claims 1, 8 and 11, which as discussed are also believed to be allowable, thus Claims 2-7, 9-10 and 12 are also believed to be in condition for allowance. Reconsideration of Claims 1, 6-7, 9-14 is requested.

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NEW CLAIMS

Claim 15 has been added and depends from claim 8, which as discussed is believed to be allowable. Accordingly Claim 15 is believed to be allowable. Support can be found in the specification as originally filed at page 40, para 3.

In view of the above amendments and remarks, Applicants submit that the claims are in condition for allowance and the Examiner would be justified in allowing them.

Respectfully submitted,

By

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Jill Denesvich
Name of applicant, assignee or Registered Representative

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February 21, 2007

Date

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